

IN THE CLAIMS:

1. (Previously presented) A method, operable in a data processing system having a plurality of processes, for performing communication management, comprising the steps of:

 sending a communication management request from a first process within said plurality of processes to an adapter associated with a second process within said plurality of processes, wherein a private data field contains communication attributes for a plurality of communication connections and unreliable datagram resolutions;

 receiving a reply to said communication establishment request; and

 responsive to said second process allowing said communication management request, initiating, under control of said adapter, multiple communication connections and unreliable datagram resolutions.

2. (Previously presented) The method as recited in claim 1, wherein said first process is an active side of the process.

3. (Previously presented) The method as recited in claim 1, wherein said second process is a passive side of the process.

4. (Canceled)

5. (Currently amended) The method as recited in ~~claim 4,~~ claim 1, wherein said channel adapter is a host channel adapter.

6. (Currently amended) The method as recited in ~~claim 4,~~ claim 1, wherein said channel adapter is a destination channel adapter.

7. (Canceled)

8. (Previously presented) The method as recited in claim 1, further comprising:

determining that said first process within said plurality of processes has received a reply from said second process within a specified period of time;

passing said reply to said first process; and

processing said reply message.

9. (Previously presented) The method as recited in claim 1, further comprising:
determining that said first process has not received said reply from said second process within a specified period of time; and
aborting a multiple connections and unreliable datagram resolutions communication establishment process.

10. (Previously presented) The method as recited in claim 8, further comprising:
responsive to said reply being received by said first process, creating a communication management message; and
posting said communication management message as a work request on a communication management send queue associated with said first process.

11. (Previously presented) The method as recited in claim 10, wherein said communication management message is a "ready to use" communication management message.

12. (Previously presented) The method as recited in claim 10, further comprising:
converting, by a channel interface, said work request into a work queue element;
processing, by a channel adapter, said work request; and
sending said communication management message to said second process.

13. (Previously presented) A method, operable in a data processing system having a plurality of processes, for establishing multiple connections, said method comprising the steps of:

sending a connection establishment request from a first process within said plurality of processes to an adapter associated with a second process within said plurality of processes, wherein a private data field contains a connection indicator;
receiving a reply to said connection establishment request; and
responsive to said second process approving said request, establishing multiple communication connections between said first process and said second process.

14. (Previously presented) The method as recited in claim 13, further comprising:
placing said communication establishment request in a receive queue of a communication manager associated with said second process; and
passing said communication establishment request to said second process.

15. (Previously presented) The method as recited in claim 13, further comprising:
posting a reply to said communication establishment request as a work request on a communication management send queue associated with said second process; and
converting said work request into a work queue element by a channel interface.

16. (Previously presented) The method of claim 13, wherein said multiple connections are considered established when said second process receives one of a message from at least one established connection and a "ready to use" message.

17. (Previously presented) A system, comprising:
a bus system;
a communications unit connected to said bus system;
a memory, including a set of instructions, connected to said bus system; and
a processing unit connected to said bus system, wherein said processing unit includes at least one processor, wherein said processing unit executes said set of instructions to send a communication management request, via said communications unit, from a first process within a plurality of processes to an adapter associated with a second process within said plurality of processes; and

responsive to said second process allowing said communication management request, initiates, under control of said adapter, multiple communication connections and unreliable datagram resolutions.

18. (Previously presented) A system, comprising:
a bus system;
a communications unit connected to said bus system;
a memory, including a set of instructions, connected to said bus system; and
a processing unit connected to said bus system, wherein said processing unit includes at least one processor, wherein said processing unit executes said set of instructions to send a connection establishment request, via said communications unit, from a first process within a plurality of processes to an adapter associated with a second process within said plurality of processes, and responsive to said second process accepting said connection establishment request from said first process, establishes multiple communication connections between said first process and said second process.

19. (Previously presented) A system, operable in a data processing system having a plurality of processes, for performing a communication connection, comprising:
sending means for sending a communication management request, containing multiple requests for connections or unreliable datagram resolutions, from a first process within said plurality of processes to an adapter associated with a second process within said plurality of processes; and
initiating means, responsive to said second process allowing said communication management request, for initiating, under control of said adapter, multiple communication connections and unreliable datagram resolutions.

20. (Previously presented) A system, operable in a data processing system having a plurality of processes, for performing a plurality of communication connections, comprising:

receiving means for receiving a connection establishment request from a first process within said plurality of processes to an adapter associated with a second process within said plurality of processes;

sending means for sending a reply communication establishment message, under control of said adapter, to said first process; and

establishing means, responsive to said second process receiving said communication establishment message from said first process, for establishing multiple communication connections between said first process and said second process.

21. (Previously presented) A computer program product in a computer-readable medium for performing a communication connection, comprising:

instructions for sending a communication management request from a first process within a plurality of processes to an adapter associated with a second process within said plurality of processes; and

instructions, responsive to said second process allowing said communication management request, for initiating, under control of said adapter, multiple communication connections and unreliable datagram resolutions.

22. (Previously presented) A computer program product in a computer-readable medium for performing multiple communication connections, comprising:

instructions for sending a connection establishment request from a first process within a plurality of processes to an adapter associated with a second process within said plurality of processes; and

instructions, responsive to said second process accepting said connection establishment request from said first process, for establishing multiple communication connections between said first process and said second process.

23. (Previously presented) The method of claim 13, wherein said communications indicator contains communication attributes for a plurality of connections.

24. (Previously presented) The method of claim 13, wherein said communications indicator contains a name of a connection group.